## AMENDMENTS TO THE SPECIFICATION

The paragraph beginning on page 16, line 7, is being amended as follows:

5. The compound according to 1 represented by the formula (I-d):

$$\begin{array}{c}
R^{7d} \\
\downarrow \\
0 \\
R^{3d}
\end{array}$$
(I-d)

wherein  $\mathbf{R}^{\mathrm{3d}}$  and  $\mathbf{R}^{\mathrm{16d}},$  the same or different, independently represent

- 1) a hydroxyl group,
- 2) a  $C_1$  to  $C_{22}$  alkoxy group which may have a substituent,
- 3) an unsaturated  $C_2$  to  $C_{22}$  alkoxy group which may have a substituent,
- 4) a  $C_7$  to  $C_{22}$  aralkyloxy group which may have a substituent,
- 5)  $R^dC(=0)-O-$ , wherein  $R^d$  represents
  - a) a hydrogen atom,
  - b) a  $C_1$  to  $C_{22}$  alkyl group which may have a substituent,
- c) an unsaturated  $C_2$  to  $C_{22}$  alkyl group which may have a substituent,
  - d) a C<sub>6</sub> to C<sub>14</sub> aryl group which may have a substituent,
- e) a 5-membered to 14-membered heteroaryl group which may have a substituent,
  - f) a  $C_7$  to  $C_{22}$  aralkyl group which may have a

substituent,

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- g) a 5-membered to 14-membered heteroaralkyl group which may have a substituent,
- h) a  $C_1$  to  $C_{22}$  alkoxy group which may have a substituent,
- i) an unsaturated  $C_2$  to  $C_{22}$  alkoxy group which may have a substituent,
- j) a  $C_6$  to  $C_{14}$  aryloxy group which may have a substituent or
- k) a 5-membered to 14-membered heteroaryloxy group which may have a substituent or
- 6)  $R^{dN1}R^{dN2}N$ -CO-O-, wherein  $R^{dN1}$  and  $R^{dN2}$ , the same or different, independently represent
  - a) a hydrogen atom,
  - b) a  $C_1$  to  $C_{22}$  alkyl group which may have a substituent,
- c) an unsaturated  $C_2$  to  $C_{22}$  alkyl group which may have a substituent,
  - d) a  $C_6$  to  $C_{14}$  aryl group which may have a substituent,
- e) a 5-membered to 14-membered heteroaryl group which may have a substituent,
- f) a  $C_7$  to  $C_{22}$  aralkyl group which may have a substituent,
- g) a 5-membered to 14-membered heteroaralkyl group which may have a substituent,
- h) a  $C_3$  to  $C_{14}$  cycloalkyl group which may have a substituent,
  - i) a 3-membered to 14-membered non-aromatic

heterocyclic group which may have a substituent or

j) a 3-membered to 14-membered non-aromatic hetérocyclic group formed by  $R^{dN1}$  and  $R^{dN2}$  together in combination with the nitrogen atom to which  $R^{dN1}$  and  $R^{dN2}$  are bonded, wherein the 3-membered to 14-membered non-aromatic heterocyclic group may have a substituent and

 $R^{7d}$  and  $R^{21d}$ , the same or different, independently represent

1) a hydroxyl group,

1.

- 2) a  $C_1$  to  $C_{22}$  alkoxy group which may have a substituent,
- 3) an unsaturated  $C_2$  to  $C_{22}$  alkoxy group which may have a substituent,
- 4) a C<sub>7</sub> to C<sub>22</sub> aralkyloxy group which may have a substituent,
- 5)  $R^{d}C(=0)-0-$ , wherein  $R^{d}$  is the same as defined above,
- 6)  $R^{dN1}R^{dN2}N$ -CO-O-, wherein  $R^{dN1}$  and  $R^{dN2}$  are the same as defined above,
- 7)  $R^{dN1}R^{dN2}N-SO_2-O-$ , wherein  $R^{dN1}$  and  $R^{dN2}$  are the same as defined above,
- 8)  $R^{dN1}R^{dN2}N$ -CS-O-, wherein  $R^{dN1}$  and  $R^{dN2}$  are the same as defined above,
- 9)  $R^{dN4}$ -SO<sub>2</sub>-O-, wherein  $R^{dN4}$  represents
  - a) a  $C_1$  to  $C_{22}$  alkyl group which may have a substituent,
  - b) a C<sub>6</sub> to C<sub>14</sub> aryl group which may have a substituent,
- c) a  $C_1$  to  $C_{22}$  alkoxy group which may have a substituent,
- d) an unsaturated  $C_2$  to  $C_{22}$  alkoxy group which may have a substituent,
  - e) a C<sub>6</sub> to C<sub>14</sub> aryloxy group which may have a

substituent,

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- f) a 5-membered to 14-membered heteroaryloxy group which may have a substituent,
- g) a  $C_7$  to  $C_{22}$  aralkyloxy group which may have a substituent or
- h) a 5-membered to 14-membered heteroaralkyloxy group which may have a substituent,
- 10) (R<sup>dN5</sup>O)<sub>2</sub>PO-O-, wherein R<sup>dN5</sup> represents
  - a) a  $C_1$  to  $C_{22}$  alkyl group which may have a substituent,
- b) an unsaturated  $C_2$  to  $C_{22}$  alkyl group which may have a substituent,
  - c) a C<sub>6</sub> to C<sub>14</sub> aryl group which may have a substituent,
- d) a 5-membered to 14-membered heteroaryl group which may have a substituent,
- e) a  $C_7$  to  $C_{22}$  aralkyl group which may have a substituent or
- f) a 5-membered to 14-membered heteroaralkyl group which may have a substituent,
- 11)  $(R^{dN1}R^{dN2}N)_2PO-O-$ , wherein  $R^{dN1}$  and  $R^{dN2}$  are the same as defined above or
- 12)  $(R^{dN1}R^{dN2}N)(R^{dN5}O)PO-O-$ , wherein  $R^{dN1}$ ,  $R^{dN2}$  and  $R^{dN3}$   $R^{dN5}$  are the same as defined above; a pharmacologically acceptable salt thereof, or a hydrate of those;

The paragraph beginning on page 20, line 18, is being amended as follows:

7. The compound according to 5 represented by the formula (I-e):

wherein  $R^{3e}$ ,  $R^{16e}$  and  $R^{21e}$ , the same or different, independently represent

- 1) a hydroxyl group,
- 2) a  $C_1$  to  $C_{22}$  alkoxy group which may have a substituent,
- 3) an unsaturated  $C_2$  to  $C_{22}$  alkoxy group which may have a substituent,
- 4) a  $C_7$  to  $C_{22}$  aralkyloxy group which may have a substituent,
- 5) an aliphatic  $C_2$  to  $C_6$  acyl group which may have a substituent or
- 6)  $\textbf{R}^{\text{eN1}}\textbf{R}^{\text{eN2}}\textbf{N}\text{-CO-O-,}$  wherein  $\textbf{R}^{\text{eN1}}$  and  $\textbf{R}^{\text{eN2}}$  independently represent
  - a) a hydrogen atom or
- b) a  $C_1$  to  $C_6$  alkyl group which may have a substituent and

 $R^{7e}$  represents  $R^e$ -C(=Y<sup>e</sup>)-O-, wherein Y<sup>e</sup> represents an oxygen atom or sulfur atom, and  $R^e$ , the same or different, represents

- a) a hydrogen atom,
- b) a C<sub>1</sub> to C<sub>22</sub> alkyl group which may have a substituent,
- c) a C<sub>6</sub> to C<sub>14</sub> aryl group which may have a substituent,
- d) a 5-membered to 14-membered heteroaryl group which may have a substituent,

- e) a  $C_7$  to  $C_{10}$  aralkyl group which may have a substituent,
- f) a 5-membered to 14-membered heteroaralkyl group which may have a substituent,
- g) a 3-membered to 14-membered non-aromatic heterocyclic group which may have a substituent,
  - h) a group of the formula (III):

$$R^{eN3} \xrightarrow{X_e} \begin{cases} R^{eN2} \\ N \\ N \end{cases}$$
 (III)

wherein A) n represents an integer of 0 to 4,  $X_{\text{e}} \text{ represents} \label{eq:Xe}$ 

- i) -CHR<sup>eN4</sup>-,
- ii) -NR<sup>eN5</sup>-,
- iii) -O-,
- iv) -S-,
- v) -SO- or
  - $vi) -SO_2-,$

 $R^{\text{eN1}}$  represents

- i) a hydrogen atom or
- ii) a  $C_1$  to  $C_6$  alkyl group which may have a substituent,

R<sup>eN2</sup> represents

- i) a hydrogen atom or
- ii) a  $C_1$  to  $C_6$  alkyl group which may have a substituent,

 $R^{\text{eN3}}$  and  $R^{\text{eN4}}$ , the same or different, independently represent

- i) a hydrogen atom,
- ii) a  $C_1$  to  $C_6$  alkyl group which may have a substituent,
- iii) an unsaturated  $C_2$  to  $C_{10}$  alkyl group which may have a substituent,
  - iv) a  $C_6$  to  $C_{14}$  aryl group which may have a substituent,
- v) a 5-membered to 14-membered heteroaryl group which may have a substituent,
- vi) a  $C_7$  to  $C_{10}$  aralkyl group which may have a substituent,
- vii) a  $C_3$  to  $C_8$  cycloalkyl group which may have a substituent,
- viii) a  $C_4$  to  $C_9$  cycloalkylalkyl group which may have a substituent,
- ix) a 5-membered to 14-membered heteroaralkyl group
  which may have a substituent,
- x) a 5-membered to 14-membered non-aromatic heterocyclic group which may have a substituent,
- xi)  $-NR^{eN6}R^{eN7}$ , wherein  $R^{eN6}$  and  $R^{eN7}$ , the same or different, independently represent a hydrogen atom or a  $C_1$  to  $C_6$  alkyl group which may have a substituent or
- xii) a 5-membered to 14-membered non-aromatic heterocyclic group formed by  $R^{eN3}$  and  $R^{eN4}$  together in combination with the carbon atom to which  $R^{eN3}$  and  $R^{eN4}$  are bonded, wherein the 5-membered to 14-membered non-aromatic heterocyclic group may have a substituent and

R<sup>eN5</sup> represents

- i) a hydrogen atom,
- ii) a  $C_1$  to  $C_6$  alkyl group which may have a substituent,
- iii) an unsaturated  $C_2$  to  $C_{10}$  alkyl group which may have a substituent,
  - iv) a  $C_6$  to  $C_{14}$  aryl group which may have a substituent,
- v) a 5-membered to 14-membered heteroaryl group which may have a substituent,
- vi) a  $C_7$  to  $C_{10}$  aralkyl group which may have a substituent,
- vii) a  $C_3$  to  $C_8$  cycloalkyl group which may have a substituent,
- viii) a  $C_4$  to  $C_9$  cycloalkylalkyl group which may have a substituent,
- ix) a 5-membered to 14-membered heteroaralkyl group
  which may have a substituent,
- x) a 5-membered to 14-membered non-aromatic heterocyclic group which may have a substituent or
- xi) a 5-membered to 14-membered non-aromatic heterocyclic group formed by  $R^{eN3}$  and  $R^{eN5}$  together in combination with the nitrogen atom to which  $R^{eN3}$  and  $R^{eN5}$  are bonded, wherein the 5-membered to 14-membered non-aromatic heterocyclic group may have a substituent, B)
- $X_e$ , n,  $R^{eN3}$ ,  $R^{eN4}$  and  $R^{eN5}$  independently represent the same group as defined above, and  $R^{eN1}$  and  $R^{eN2}$  independently represent a 5-membered to 14-membered non-aromatic heterocyclic

group formed by  $R^{\text{eN1}}$  and  $R^{\text{eN2}}$  together, wherein the 5-membered to 14-membered non-aromatic heterocyclic group may have a substituent,

C)

 $X_e$ , n,  $R^{eN2}$ ,  $R^{eN4}$  and  $R^{eN5}$  independently represent the same group as defined above, and  $R^{eN1}$  and  $R^{eN2}$  independently represent a 5-membered to 14-membered non-aromatic heterocyclic group formed by  $R^{eN1}$  and  $R^{eN2}$  together, wherein the 5-membered to 14-membered non-aromatic heterocyclic group may have a substituent or

D)

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 $X_e$ , n,  $R^{eN1}$ ,  $R^{eN4}$  and  $R^{eN5}$  independently represent the same group as defined above, and  $R^{eN2}$  and  $R^{eN3}$  independently represent a 5-membered to 14-membered non-aromatic heterocyclic group formed by  $R^{eN2}$  and  $R^{eN3}$  together, wherein the 5-membered to 14-membered non-aromatic heterocyclic group may have a substituent or

i) a group of the formula (IV):

wherein  $R^{\text{eN8}}$  and  $R^{\text{eN9}}$ , the same or different, independently represent

- i) a hydrogen atom,
- ii) a  $C_1$  to  $C_6$  alkyl group which may have a substituent,
  - iii) a C<sub>6</sub> to C<sub>14</sub> aryl group which may have a

substituent,

iv) a 5-membered to 14-membered heteroaryl group which
may have a substituent,

v) a  $C_7$  to  $C_{10}$  aralkyl group which may have a substituent or

vi) a 5-membered to 14-membered heteroaralkyl group which may have a substituent; a pharmacologically acceptable salt thereof, or a hydrate of those;

The paragraph beginning on page 75, line 17, is being amended as follows:

The compound of the formula (I) can be produced by chemical modification of, a key compound such as a 6-deoxy 11107 compound or a 6-deoxy compound using a conventional method as follows. The 6-deoxy 11107 compound is obtained by culturing, under aerobic conditions, a strain belonging to the genus Streptomyces, which is capable of producing a 6-deoxy 11107 compound as a physiologically active substance of the formula (I), wherein [1] W is

 $R^3$  and  $R^{21}$  are a hydroxyl group,  $R^7$  is an acetoxy group, and  $R^{16}$ ,  $R^{17}$ ,  $R^{20}$  and  $R^{21}$  are a hydrogen atom (6-deoxy 11107B), [3] W is



 $R^3$ ,  $R^{16}$  and  $R^{21}$  are a hydroxyl group,  $R^7$  is an acetoxy group, and  $R^{17}$ ,  $R^{20}$  and  $R^{21}$  are a hydrogen atom (6-deoxy 11107D), [7] W is

 $R^3$ ,  $R^{17}$ ,  $R^{16}$  and  $R^{21}$  are a hydroxyl group,  $R^7$  is an acetoxy group, and  $R^{20}$  and  $R^{21'}$  are a hydrogen atom, and collecting the compound from the cells and culture solution; and the 6-deoxy compound is obtained by biologically converting a compound of the formula (I), wherein

## [1] W is



 $R^3$  and  $R^{21}$  are a hydroxyl group,  $R^7$  is an acetoxy group, and  $R^{16}$ ,  $R^{17}$ ,  $R^{20}$  and  $R^{21}$  are a hydrogen atom (hereinafter referred to as "6-deoxy 11107B") to a compound of the formula (I), wherein [2] W is

 $R^3$  and  $R^{21}$  are a hydroxyl group,  $R^7$  is an acetoxy group, and  $R^{16},$   $R^{17},\ R^{20}$  and  $R^{21'}$  are a hydrogen atom,

## [4] W is



 $R^{21}$  and  $R^{21'}$  form an oxo group together with carbon to which  $R^{21}$  and  $R^{21'}$  are bonded,  $R^3$ ,  $R^{16}$  and  $R^{20}$  are a hydroxyl group,  $R^7$  is an acetoxy group, and  $R^{17}$  is a hydrogen atom,

[5] W is

 $R^3,\ R^{16},\ R^{20}$  and  $R^{21}$  are a hydroxyl group,  $R^7$  is an acetoxy group, and  $R^{17}$  and  $R^{21'}$  are a hydrogen atom,

[6] W is

 ${
m R}^3$ ,  ${
m R}^7$ ,  ${
m R}^{16}$  and  ${
m R}^{21}$  are a hydroxyl group, and  ${
m R}^{17}$ ,  ${
m R}^{20}$  and  ${
m R}^{21'}$  are a hydrogen atom or

[8] W is

 $R^{21}$  and  $R^{21'}$  form an oxo group together with carbon to which  $R^{21}$  and  $R^{21'}$  are bonded,  $R^3$  and  $R^{16}$  are a hydroxyl group,  $R^7$  is an acetoxy group, and  $R^{17}$  and  $R^{20}$  are a hydrogen atom; and by chemically modifying the key compound using a conventional method in an appropriate manner.

The paragraph beginning on page 220, line 10, is being amended as follows:

(2) (8E,12E,14E)-3,16,21-trihydroxy-6,10,12,16,20-pentamethyl-7-(N-methyl-N-(2-(piperidin-1-yl)ethyl)carbamoyloxy)18,19-epoxytricosa-8,12,14-trien-11-olide (compound 53)

The paragraph beginning on page 230, line 6, is being amended as follows:

(2) (8E,12E,14E)-3,16,21-trihydroxy-6,10,12,16,20-pentamethyl-7-(N-methyl-N-(2-(N'-methylamino)cyclohexyl)carbamoyloxy)-18,19-epoxytricosa-8,12,14-trien-11-olide (compound 57)